

acted by it to fall afterwards upon a sheet of white Paper placed at some distance behind it, and there by that Refraction to paint the usual Colours of the Prism. And then causing the first Prism to be turned about its Axis as above, I observed that when those Rays which in this Prism had suffered the greatest Refraction and appeared of a blew and violet Colour began to be totally reflected, the blew and violet Light on the Paper which was most refracted in the second Prism received a sensible increase above that of the red and yellow, which was least refracted; and afterwards when the rest of the Light which was green, yellow and red began to be totally reflected in the first Prism, the light of those Colours on the Paper received as great an increase as the violet and blew had done before. Whence 'tis manifest, that the beam of Light reflected by the Base of the Prism, being augmented first by the more Refrangible Rays and afterwards by the less Refrangible ones, is compounded of Rays differently Refrangible. And that all such reflected Light is of the same Nature with the Sun's Light, before its Incidence on the Base of the Prism, no Man ever doubted: it being generally allowed, that Light by such Reflexions suffers no Alteration in its Modifications and Properties. I do not here take notice of any Refractions made in the Sides of the first Prism, because the Light enters it perpendicularly at the first Side, and goes out perpendicularly at the second Side, and therefore suffers none. So then, the Sun's incident Light being of the same temper and constitution with his emergent Light, and the last being compounded of Rays differently Refrangible, the first must be in like manner compounded.

Fig. 21. *Illustration.* In the 21th Figure, A B C is the first Prism, B C its Base, B and C its equal Angles at the Base, each of

of 45 degrees, A the Sun's Light let one third part of of the Prism, M G ed Ray, M N the V X Y the second through it is refracted beam, and N p the first Prism A B C order of the Letter and more obliquely their most obliquely and going on to p Afterwards by con Rays M G are also the Rays N t. As its Composition, from the less Refrangible is of the same Nature the Reflexion of the tion therein.

*Exper. 10.* Two tried so together, to Parallel, they come shining into my d Window-shut, I p some distance from of the Prisms might and that those Rays one Prism, might of both Prisms, and cond Prism. This the first Prism, c